

AMENDMENTS TO THE SPECIFICATION

Please replace the first paragraph on page 1 of the specification with the following new paragraph:

This application is a continuation of and claims the benefit of U.S. Application No. 09/559,671, filed April 27, 2000, (now U.S. Patent No. 6,613,514), which is a continuation of U.S. Application No. 08/769,062, filed December 18, 1996 (now U.S. Patent No. 6,335,160), the disclosures of which are incorporated by reference herein in their entireties for all purposes.

Please replace the text on page 83, line 8 through page 86, line 5, with the following:

1. AACCTCCAG TTCCGAACCC CATATGATGA TCACCTGCG TAACTGCCG
(SEQ ID NO:1)
2. AACCTCCAG TTCCGAACCC CATATGAAAA AAACCGCT (SEQ ID NO:2)
3. AACCTCCAG TTCCGAACCC ATATACATAT GCGTGCTAAA (SEQ ID NO:3)
4. AACCTCCAG TTCCGAACCC CATATGAAAT ACCTGCTGCC GACC (SEQ ID NO:4)
5. AACCTCCAG TTCCGAACCC GATATACATA TGAAACAGTC (SEQ ID NO:5)
6. TGGTGTTATG TCTGCTCAGG CDATGGCDGT DGAYTTYCAY CTGGTTCCGG
TTGAAGAGGA (SEQ ID NO:6)
7. GGCTGGTTTC GCTACCGTTG CDCARGCDGC DCCDAARGAY CTGGTTCCGG
TTGAAGAGGA (SEQ ID NO:7)

8. CACCCCGATC GCTATCTCTT CYTTYGCDTC YACYGGYTCY CTGGTTCCGG
TTGAAGAGGA (SEQ ID NO:8)

9. GCTGCTGGCT GCTCAGCCGG CDATGGCDAT GGAYATYGGY CTGGTTCCGG
TTGAAGAGGA (SEQ ID NO:9)

10. TGCCGCTGCT GTTCACCCCG GTDACYAARG CDGCD CARGT DCTGGTTCCG
GTTGAAGAGG A (SEQ ID NO:10)

11. CCCGGCTTTC TGGAACCGTC ARGCDGCDCA RGCDCTGGAC
GTTGCTAAAA AACTGCAGCC (SEQ ID NO:11)

12. ACGTTATCCT GTTCCTGGGT GAYGGYATGG GYGTDCCDAC CGTTACCGCT
ACCCGTATCC (SEQ ID NO:12)

13. AAAGTGGGTC CGGAAACCCC DCTGGCDATG GAYCARTTYC
CGTACGTTGC TCTGTCTAAA (SEQ ID NO:13)

14. GGTTCGGAC TCTGCTGGTA CYGCDACYGC DTAYCTGTGC
GGTGTTAAAG GTAACCTACCG (SEQ ID NO:14)

15. CTGCTCGTTA CAACCAGTGC AARACYACYC GYGGYAAAYGA
AGTTACCTCT GTTATGAACC (SEQ ID NO:15)

16. TCTGTTGGTG TTGTTACCAC YACYCGYGTD CARCAYGCDT CTCCGGCTGG
TGCTTACGCT (SEQ ID NO:16)

17. GTACTCTGAC GCTGACCTGC CDGCDGAYGC DCARATGAAC
GGTTGCCAGG ACATCGCTGC (SEQ ID NO:17)

18. ACATCGACGT TATCCTGGGT GGYGGYCGYA ARTAYATGTT CCCGGTTGGT
ACCCCGGACC (SEQ ID NO:18)

19. TCTGTTAACG GTGTTTCGTAA RCGYAARCAR AAYCTGGTDC AGGCTTGGCA
GGCTAAACAC (SEQ ID NO:19)

20. GAACCGTACC GCTCTGCTGC ARGCDGCDGA YGAYTCYTCT
GTTACCCACC TGATGGGTCT (SEQ ID NO:20)

21. AATACAACGT TCAGCAGGAC CAYACYAARG AYCCDACYCT
GCAGGAAATG ACCGAAGTTG (SEQ ID NO:21)

22. AACCCGCGTG GTTCTACCT GTTYGTDGAR GGYGGYCGYA
TCGACCACGG TCACCACGAC (SEQ ID NO:22)

23. GACCGAAGCT GGTATGTTCG AYAAYGCDAT YGCDAARGCT
AACGAACTGA CCTCTGAACT (SEQ ID NO:23)

24. CCGCTGACCA CTCTCACGTT TTYTCYTTYG GYGGYTAYAC CCTGCGTGGT
ACCTCTATCT (SEQ ID NO:24)

25. GCTCTGGACT CTAAATCTTA YACYTCYATY CTGTAYGGYA
ACGGTCCGGG TTACGCTCTG (SEQ ID NO:25)

26. CGTTAACGAC TCTACCTCTG ARGAYCCDTC YTAYCARCAG CAGGCTGCTG
TTCCGCAGGC (SEQ ID NO:26)

27. AAGACGTTGC TGTTTTTCGCT CGYGGYCCDC ARGCDCACT GGTTCACGGT
GTTGAAGAAG (SEQ ID NO:27)

28. ATGGCTTTCG CTGGTTGCGT DGARCCDTAY ACYGAYTGYA
ACCTGCCGGC TCCGACCACC (SEQ ID NO:28)

29. TGCTCACCTG GCTGCTTMAC CDCCDCCDCT GGCDCTGCTG GCTGGTGCTA
TGCTGCTCCT C (SEQ ID NO:29)

30. TTCCGCCTCT AGAGAATTCT TARTACAGRG THGGHGCCAG
GAGGAGCAGC ATAGCACCAG CC (SEQ ID NO:30)

31. AAGCAGCCAG GTGAGCAGCG TCHGGRATRG ARGTHGCGGT
GGTCGGAGCC GGCAGGTT (SEQ ID NO:31)

32. CGCAACCAGC GAAAGCCATG ATRTGHGCHA CRAARGTYTC
TTCTTCAACA CCGTGAACCA (SEQ ID NO:32)

33. GCGAAAACAG CAACGTCTTC RCCRCCRTGR GTYTCRGAHG
CCTGCOGAAC AGCAGCCTGC (SEQ ID NO:33)

34. AGAGGTAGAG TCGTTAACGT CHGGRCGRGA RCCRCCRCCC
AGAGCGTAAC CCGGACCGTT (SEQ ID NO:34)

35. AAGATTTAGA GTCCAGAGCT TTRGAMGGHG CCAGRCCRAA
GATAGAGGTA CCACGCAGGG (SEQ ID NO:35)

36. ACGTGAGAGT GGTCAGCGGT HACCAGRATC AGRGTRTCCA
GTTTCAGAGGT CAGTTCGTTA (SEQ ID NO:36)

37. GAACATACCA GCTTCGGTCA GHGCCATRTA HGCYTTRTCG TCGTGGTGAC
CGTGGTCGAT (SEQ ID NO:37)

38. GGTAGAAACC ACGCGGGTTA CGRGAHACHA ORCGCAGHGC
AACTTCGGTC ATTCCTGCA (SEQ ID NO:38)

39. TCCTGCTGAA CGTTGTATTT CATRTCHGCH GGYTCRAACA GACCCATCAG
GTGGGTAACA (SEQ ID NO:39)

40. CAGCAGAGCG GTACGGTTCC AHACRTAYTG HGCRCCTYGG
TGTTTAGCCT GCCAAGCCTG (SEQ ID NO:40)

41. TACGAACACC GTTAACAGAA GCRTCRTCHG GRTAYTCHGG
GTCCGGGGTA CCAACCGGGA (SEQ ID NO:41)
42. CCCAGGATAA CGTCGATGTC CATRTTRTTH ACCAGYTGHG CAGCGATGTC
CTGGCAACCG (SEQ ID NO:42)
43. CAGGTCAGCG TCAGAGTACC ARTTRCGRTT HACRGTRTGA
GCGTAAGCAC CAGCCGGAGA (SEQ ID NO:43)
44. TGGTAACAAC ACCAACAGAT TTRCCHGCTT TYTTHGCRCG GTTCATAACA
GAGGTAACCT (SEQ ID NO:44)
45. CACTGGTTGT AACGAGCAGC HGCRGAHACR CCRATRGTRC
GGTAGTTACC TTAAACACCG (SEQ ID NO:45)
46. ACCAGCAGAG TCCGGAACCT GRCGRTCHAC RTTRTARGTT
TTAGACAGAG CAACGTACGG (SEQ ID NO:46)
47. GGGTTTCCGG ACCCAGTTTA CCRTTCATYT GRCCYTTTACG GATACGGGTA
GCGGTAACCG (SEQ ID NO:47)
48. CCCAGGAACA GGATAACGTT YTTHGCHGCR GTYTGRATHG
GCTGCAGTTT TTTAGCAACG (SEQ ID NO:48)
49. ACGGTTCCAG AAAGCCGGGT CTTCTCTTC AACCGGAACC AG (SEQ ID
NO:49)
50. CCTGAGCAGA CATAACACCA GCHGCHACHG CHACHGCCAG
CGGCAGTTTA CGCAGGGTGA (SEQ ID NO:50)
51. ACCGGGGTGA ACAGCAGCGG CAGCAGHGCC AGHGCRATRG
TRGACTGTTT CATATGTATA TC (SEQ ID NO:51)

52. GCCGGCTGAG CAGCCAGCAG CAGCAGRCCH GCHGCHGCGG
TCGGCAGCAG GTAGTTTCA (SEQ ID NO:52)

53. AAGAGATAGC GATCGGGGTG GTCAGHACRA TRCCCAGCAG
TTTAGCACGC ATATCTATAT (SEQ ID NO:53)

54. CAACGGTAGC GAAACCAGCC AGHGCHACHG CRATHGCRAT
AGCGGTTTTT TTCATATG (SEQ ID NO:54)

55 AGAATTCTCT AGAGGCGGAA ACTCTCCAAC TCCCAGGTT (SEQ ID NO:55)

56. TGAGAGGTTG AGGGTCCAAT TGGGAGGTCA AGGCTTGGG (SEQ ID NO:56)

Please replace the text on page 86, line 24 to page 87, line 5 with the following:

Genomic antibody expression shuttle vectors similar to those described by Gascoigne et al. (Proc. Natl. Acad. Sci. (U.S.A.) 84:2936-2940 (1987)) are constructed such that libraries of mutant V region exons can be readily cloned into the shuttle vectors. The kappa construct is cloned onto a plasmid encoding puromycin resistance and the heavy chain is cloned onto a neomycin resistance encoding vector. The cDNA derived variable region sequences encoding the mature and germline heavy and light chain V regions are reconfigured by PCR mutagenesis into genomic exons flanked by Sfi I sites with complementary Sfi I sites placed at the appropriate locations in the genomic shuttle vectors. The oligonucleotides used to create the intronic Sfi I sites flanking the VDJ exon are:

5' Sfi I: 5'-TTCCATTTC A TACATGGCCG AAGGGGCCGT
GCCATGAGGA TTTT-3' (SEQ ID NO:100);

3' Sfi I: 5'-TTCTAAATG CATGTTGGCC TCCTTGGCCG

GATTCTGAGC CTTTCAGGACC A-3' (SEQ ID NO:100).